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RTI Rejoinder to LaCapra Associates' Comments: Policy Options for North Carolina's Municipal Power Agencies

Prepared for

Legislative Study Commission on the
Future of Electric Service in North Carolina
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Center for Economics Research
Research Triangle Park, NC 27709

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INTRODUCTION

In March 1999, RTI published a report, *Policy Options for North Carolina's Municipal Power Agencies*, under the sponsorship of the Study Commission on the Future of Electric Service in North Carolina ("Study Commission"). Our report summarizes the circumstances and decisions that led to the financial difficulties of North Carolina's two municipal power agencies (MPAs)—both affiliated with ElectriCities of North Carolina, Inc. (ElectriCities). Our report also details several policy options for addressing the "MPA problem" as well as the legal and regulatory constraints on those options. We called the three main groups of options Debt Relief, Divestiture, and Dissolution. Details on each of these options are included in the March 1999 report, which is available at the following website: <http://www.rti.org/publications/cer/7135-042.pdf>.

ElectriCities retained LaCapra Associates (LCA) to review and critique our report, and LCA delivered their work product as an 18-page document in June 1999. LCA reached the following two key conclusions:

- "The Divestiture option in RTI's report does not solve the MPA stranded costs problem alone and raises MPA customers' rates by 40 to 47 percent."
- "RTI's Dissolution option goes well beyond the scope of MPA stranded costs and results in sizeable rate increases for MPA customers."

At the request of representatives of the Study Commission, RTI has reviewed the LCA document and prepared this written response to LCA's comments. First, we provide a summary response to the LCA document. Second, we summarize the structure of the LCA document. Finally, we provide detailed responses to issues raised in the "analysis section" of the LCA document following LCA's order of presentation.

SUMMARY RESPONSE TO THE LCA DOCUMENT

Our response to LCA's comments on our report on policy options for North Carolina's MPAs can be summarized as follows:

1. Our RTI report seeks only to identify, not advocate, possible solutions to the MPA problem.

LCA maintains that our Divestiture and Dissolution options are impractical and infeasible and advocates that the only sensible approach to the “MPA problem” is Debt Relief. We believe, however, that all the options identified in our report are worth considering. Because LCA focused their critique almost exclusively on the Divestiture and Dissolution options, we spend much of the remainder of this rejoinder addressing those options. However, we emphasize that our response **does not** mean that we advocate Divestiture or Dissolution over Debt Relief options. As we said in the introduction to our report, “Our goal in this report is solely to identify a rich set of policy options and a structure and method for thinking about the alternatives. Our purpose is to better inform the debate about the alternatives and to assist in the evaluation of future policy variations that may evolve from discussions of our report.”

2. The Divestiture and Dissolution policy options are feasible regardless of the amount of MPA debt that remains after any sale of MPA or member city assets.

LCA’s comments focus on the 5-page “Implementation Scenarios” section of our report—a section describing specific scenarios that we characterized as “obviously hypothetical” and “subject to many permutations.” Their comments overlook a rich set of complementary policy features described in our Sections 5.1 and 5.2 that can be used as components of the Divestiture and Dissolution options. These include various techniques for immediately retiring any remaining MPA debt after Divestiture or Dissolution and simultaneously imposing some type of electricity surcharges, price freezes, or conventional electricity rate increases for most North Carolina electricity customers. The resulting revenue flows could be used to compensate the sources of capital that would have to repay the residual debt. See Section II of this document for a discussion of specific options.

3. LCA's analysis may ultimately overstate the likely amount of residual debt under the Divestiture and Dissolution options.

Our detailed comments on LCA's critiques, calculations, and conclusions are presented in Section I. In general, we found that LCA's analysis was based on inadequate data and poor assumptions and that it was also weakened by some puzzling omissions. We believe that their document reflects an incomplete understanding of our work, due to their almost singular focus on a very small section of our report that we had characterized as hypothetical. Ultimately, this led LCA to estimate very high residual MPA debt under the Divestiture and Dissolution scenarios. Based on their high residual debt estimates, they concluded that Divestiture and Dissolution are infeasible. As summarized in point 2 above, we believe that Divestiture and Dissolution remain feasible options, regardless of the amount of residual MPA debt.

STRUCTURE OF THE LCA DOCUMENT

The LCA document contains the following sections:

- ▶ **Introduction:** 1-page section stating that LCA has refined and reexamined key assumptions in our report and has determined that "the Divestiture and Dissolution options as presented by RTI are not feasible solutions for resolving the issues surrounding MPA stranded costs."
- ▶ **LaCapra Associates:** 2-page statement of qualifications for LaCapra Associates that is substantively unrelated to the RTI report.
- ▶ **Executive Summary/Conclusion:** 2½ page summary of work reported in the last 12 pages of the LCA document.
- ▶ **I. Key Issues and Assumptions Impacting RTI's Preliminary Analysis:** 10-page section addressing the following issues suggested by LCA's subsection headings:
 - ✓ A. Municipal Power Agency Funds Available for Liquidation
 1. Decommissioning Fund
 2. Bond Interest and Principal Amounts
 3. Rate Stabilization Funds

- ✓ B. Tax-exempt Financing as Incentive to Increase Asset Sales Price
- ✓ C. Market Value of MPA Generation Assets
 1. Recent nuclear asset sales of \$20 to \$30/kW are significantly lower than RTI's estimate of \$800/kW
 2. Use of combined cycle (CC) technology as a basis for nuclear asset valuation is inappropriate in the Southeast power market
 3. Reexamination of RTI's operating costs assumptions
 4. Alternate cash flow methodology reflects more plausible mechanism for estimating nuclear plant market value
- **II. Re-examined Conclusions of RTI's Divestiture and Dissolution Options:** This final 2-page section seeks to demonstrate why our Divestiture and Dissolution options are infeasible.
 - ✓ A. Alternative Option—Hypothetical Divestiture Scenario
 - ✓ B. Alternative Option—Hypothetical Dissolution Scenario

DETAILED RESPONSES TO THE LCA DOCUMENT

In this section, we respond to the detailed comments that LCA provided in their Section I, "Key Issues and Assumptions Impacting RTI's Preliminary Analysis." LCA addresses three topics: MPA funds available for liquidation, tax-exempt financing, and the market value of MPA assets. Our responses here and in the remainder of this rejoinder are organized using the section headings in the LCA document.

I. Response to LCA Section I: Key Issues and Assumptions

IA. Municipal Power Agency Funds Available for Liquidation

Within their Section IA, LCA appears to argue that the liquidity of MPA funds implies that those funds cannot be counted as assets. Therefore, even though the assets in question were shown on the MPAs' books as of January 1, 1998 to be worth \$1.739 billion, LCA

valued them at \$850 to \$900 million (LCA, p. 18). The following subsections summarize how they arrived at that alternative valuation and include our critique of their methods.

IA1. Decommissioning Fund

LCA noted that our hypothetical analysis (Section 5.3 of our report) assumed that the value of the Trust for Decommissioning Costs would be available to reduce the MPA debt. However, we state on our pages 5-21 (on the Divestiture option) and 5-26 (on the Dissolution option) that “The state transfers the Trust for Decommissioning Costs to the purchasing IOU.” We assumed, but did not explicitly state, that the Trusts would be sold to the buyers at book value. That is, we assumed that the acquiring utility would pay for the Trust funds over and above the amount they pay for the rest of the assets. Therefore, the value of the Trust funds should be included as a liquid MPA asset under our scenarios.

IA2. Bond Interest and Principal Amounts

LCA indicates that other accounts in the MPA bond funds must be used to pay off bond interest and principal and therefore cannot be counted as an offset to their liabilities. The basis for this assertion is unclear. LCA seems to imply that the MPAs have an unstated liability to pay bond interest and principal (i.e., that the liability is not reflected on the MPA balance sheets). In short, they imply that the MPA balance sheets are inaccurate. Assuming that the audited balance sheets are accurate, MPA liabilities must be reduced by the amount of the restricted funds when those funds are disbursed to pay interest and principal. If so, that is equivalent to our assumption that those restricted funds are liquid, because they will ultimately defray part of the MPA liabilities. Thus, LCA's deduction of these restricted funds from the MPA asset values is inappropriate, at least if the balance sheets are assumed to be accurate.

IA3. Rate Stabilization Funds

In this paragraph, LCA notes that the MPAs have set aside part of their bond funds—about \$415 million at the end of 1997—to “avoid imposing ‘rate shock’ on their customers.” LCA essentially argues that these earmarked funds cannot be made available to retire the MPA debt, regardless of the terms of any resolution of the MPA crisis. The basis for that assertion is unclear. Specifically, it is

not clear why the MPAs would necessarily be allowed to retain earmarked funds for rate stabilization when other ratepayers and taxpayers are being asked to pay part of the MPA debt. We think it is logical to view the "rate shock offset" funds as funds that are eligible for debt payoff as part of a negotiated solution to the "MPA problem." After all, the negotiated solutions would likely include a whole new set of pricing policies that are intended to insulate member city customers from rate shock anyway, as is the case for the hypothetical scenarios that we described in our Section 5.3.

IB. Tax-exempt Financing as Incentive to Increase Asset Sales Price

LCA states that "A condition of asset sales prescribed in the RTI report assumes that a buyer (of both generation and distribution assets) will pay more than their market values because tax-free financing would create additional value for the purchasers." However, we incorporate that assumption only in our hypothetical analysis of Section 5.3, and not in the entire report, as LCA appears to assert. On pages 5-7, 5-22, and 5-27 of our report, we discuss many "permutations" on each of our policy scenarios, which LCA appears to have overlooked in making their assertion:

- Page 5-7, specifically our bullet and the associated footnote on bond issues as an option for obtaining revenue to offset the MPA debt. In the text, we state that, "Depending on how the bond issues are structured, they could possibly be tax-exempt, rather than taxable, type bonds." In the footnote, we state that any such financing "raises federal tax issues" under the so-called "private use restrictions" imposed by the IRS. We also state that "Some of the succeeding sections of this report assume the availability of tax-exempt financing, which would clearly have to meet these IRS standards." Thus, we recognize and have allowed for the possibility that any state financing of MPA asset purchases might have to be accomplished with non-tax-exempt state bond issues.
- Pages 5-22 and 5-27. Our last checkpoint under item 5 at the top of page 5-22 and the same checkpoint on page 5-27 indicate alternative methods of implementing Divestiture and Dissolution, respectively. Specifically, we point out that "...the state may or may not include ... a requirement that the IOUs finance these asset purchases themselves instead of receiving state financing." Our item 5 on those pages does not propose that the state's financing would be

at tax-exempt rates—only that the state may offer financing “...at a preferred rate of interest, perhaps as low as the state’s borrowing rate.” Naturally, the state’s borrowing cost would be higher if the interest payments on any bond issue were subject to taxation.

As these passages illustrate, RTI did *not* assume the “tax-financing incentive” throughout our entire report. Rather, we incorporated the “tax-financing incentive” *only* in the hypothetical analysis of Section 5.3.

Underlying all of LCA’s comments on tax-exempt financing is the notion that it will be nearly impossible to structure any kind of deal that allows the state to extend tax-exempt financing for purchases of MPA assets. That notion is not obvious to us, but even if it is impossible for the state to extend tax-exempt financing, we anticipated this possibility in our report.

IC. Market Value of MPA Generation Assets

In Section IC of their document, LCA takes four different approaches to demonstrate that we overvalued the MPA generation assets at \$800/kW in our hypothetical examples of implementation scenarios for Divestiture and Dissolution. We find flaws, some of them quite significant, in both their analysis and their data for all four approaches. We reiterate that RTI does not claim to be an expert at utility property valuation. We provided the hypothetical analysis only as a quantitative starting point that, if found by the Study Commission to be of interest, should be refined and reexamined in more detail. That said, we still believe that our estimate of \$800/kW is realistic, as summarized in the following paragraphs.

IC1. Recent Nuclear Asset Sales

LCA’s comments in this section suggest that RTI was unaware of recent sales prices for nuclear plants. However, our report clearly recognizes that recent nuclear asset sales have occurred in the price ranges that LCA quoted. For example, in Table 2-3 on page 2-20 and in the associated text of our report we noted that the hardware at the Three Mile Island (TMI) nuclear plant sold for \$26/kW and

that the combined sale of fuel and hardware at TMI brought \$115/kW.¹

In addition, LCA appears to considerably undervalue a unique feature of our hypothetical implementation scenario—that the state of North Carolina would assume liability for all decommissioning and decontamination (D&D) liabilities in excess of those covered by the Trust funds. We are not aware of any nuclear plant sale for which that kind of liability coverage was provided to the buyer free of charge. And it is our impression that the potential cost exposure to such liabilities is the major “wild card” that severely depresses the value of nuclear facilities.² Therefore, there are no sales data for nuclear facilities that compare to the kind of scenario that we envisioned in our hypothetical example.

We also disagree with LCA's assertion that nuclear fuel is not part of plant value (an assertion that contributes to LCA's lower estimate of nuclear plant values). Utilities own a nuclear fuel inventory at any point in time. That inventory consists of the “unburned” portion of the fuel in the nuclear reactor core plus any new fuel that is ready for the refueling cycle—utilities replace about one-third of the reactor core every 18 months with this new fuel. Both MPAs own proportional shares of the nuclear fuel inventory at the nuclear plants where they have ownership shares. That fuel is quite valuable and should be considered part of any sale of nuclear capacity.

In addition, consider the fact that the original cost of MPA capacity (mostly nuclear) was about \$1,900/kW, and that the current undepreciated book value of that capacity is about \$1,360/kW.

¹As a side note, it seems that the sales value of nuclear capacity may be on the rise. Amergen recently purchased Niagara Mohawk Power Corporation's share in the Nine Mile Point 2 plant for \$167/kW.

²As stated, our analysis “stripped” nuclear capacity sales of any decommissioning and decontamination (D&D) costs in excess of those covered by the Trust funds. Although we were not explicit about it, we stripped nuclear capacity sales of upside high-level waste disposal risk. These are separate risks related solely to disposing of the fuel. Utilities pay a charge set by DOE to cover such waste disposal costs, and this charge could increase if costs rise and delays continue. Thus, relieving nuclear plant buyers of these risks as well as the risks of excessive D&D costs should have considerable market value, although we did not attempt to estimate this value explicitly. The “low” purchase prices for nuclear capacity we see in the market now reflect the assumption of these upside risks by the buyer, and we are confident that this assumption of risk has a large “restraining effect” on the purchase price.

Second, consider the fact that RTI assumed away what is arguably the largest and riskiest cost factor associated with that capacity—the excess cost (above Trust fund balances) of future D&D costs. Third, consider that the nuclear plants where the MPAs own shares are arguably among the best such plants in the United States and have very low running costs. Fourth, consider that the nation will soon require much new generating capacity—this at a time when the best alternative for base load facilities costs at least \$600/kW and has much higher running costs than do nuclear plants. Based on these four considerations, we question LCA's conclusion in this section that a valuation of \$800/kW is too high.

IC2. Use of Combined Cycle Technology as a Basis for Nuclear Asset Valuation

In this section, LCA argues that nuclear plants should not be compared to what is currently the most economical alternative for base and intermediate load capacity—combined cycle (CC) plants. They state that, "In the Southeastern Reliability Council (SERC) region, it appears that a new [combined cycle plant] is not currently an economically efficient investment, which makes it inappropriate as a measure of the comparative value of a nuclear plant." As detailed below, we find LCA's conclusion factually inaccurate and inconsistent with the market environment of retail competition, which is the underpinning for our analysis.

First, LCA seems to contend that CC plants will not be constructed within the SERC region. Specifically, LCA states (p.10) that the SERC region has "an abundance of low variable-cost units that can currently produce energy at a low price" and that "As a result, the most economic unit to build in this region would be a peaking plant." Yet the Santee-Cooper utility in South Carolina—one of the major utilities in the SERC region—announced in February 1999 that it will construct a 500 MW CC plant, the John S. Rainey Generating station.

Second, even if LCA argues that Santee-Cooper's decision is in some sense "irrational" in the current regulated market environment, that argument becomes much less relevant in an environment of retail competition. Under competition, electricity is wheeled to locations all over the country and particularly the Eastern United States, subject to constraints within our transmission

systems. Therefore, current capacity needs strictly within SERC become much less relevant than the total capacity needs in the Eastern United States. That view suggests that CC plants are appropriate comparators for valuing North Carolina's nuclear plants, contrary to LCA's assertion.

Third, the integrated resource plans that were filed on September 1, 1998, by Duke and CP&L show that both are planning to add CC plants within the next 10 years. For example, CP&L forecasts that they will add 300 MW of CC capacity in each of the four years from 2004 to 2007, for a total of 1,200 MW. Even though the construction of new baseload capacity is not yet underway in North Carolina, it is certainly anticipated by the state's IOUs in the near future, even in the current regulated environment. This further suggests that a baseload CC plant is an appropriate comparator for nuclear plants, as we maintain in our report.

IC3. Operating Costs Assumptions

This section of the LCA report reflects a misunderstanding of our incremental cost analysis. In this section, LCA first computes their estimates of the **total** cost of operating nuclear capacity. They then inserted that value into our **incremental** cost analysis method along with their increased estimates of CC capacity availability to recompute the value of nuclear capacity. They conclude that nuclear capacity (stripped of excess D&D liabilities) would be worth much less than CC capacity—somewhere between 50 and 65 percent less. This result is paradoxical and results from a misapplication of the incremental cost method that we used for capacity valuation in Appendix A of our report.

Our method was designed to be simplified and illustrative. We did not attempt to identify **all** of the costs associated with either nuclear or CC plants. Instead, as we stated in our Section 5.3, we assumed that a fair price per kW of nuclear capacity is equal to the sum of two components: (1) the current price of CC capacity and (2) the discounted present value of the lower incremental costs of operating nuclear capacity compared to CC capacity. In other words, we sought to isolate the differential value of only the recurring **incremental**, not the total, costs of operating nuclear capacity over and above the recurring costs of operating CC capacity.

In contrast to our method, LCA totaled all the possible costs of operating nuclear capacity and, in the process, identified a host of indirect costs, including all types of non-variable costs. They then appeared to compare their **total** costs of operating nuclear capacity to our **incremental** costs of operating CC capacity, rather than comparing incremental costs to incremental costs. LCA seemed to conclude that the variable cost of operating nuclear capacity far exceeds the variable cost of operating CC capacity. Finally, they discounted their estimate of those “excess operating costs” and deducted that estimate from the current price of CC capacity to derive nuclear capacity values ranging between \$275 and \$400/kW. The fundamental problem with LCA’s approach is that they overlooked the **total** costs of operating CC capacity. Had they also allocated all types of A&G costs to CC capacity, they would have had a very different result.

Our simplified method did not account for any premium (above CC) in operating costs, other than running costs, for nuclear capacity. That is, operating costs for nuclear capacity beyond running costs (fuel and operating and maintenance costs) may indeed be somewhat higher than for CC, as LCA implies. Nonetheless, we do not believe that such a premium would cause the value of nuclear capacity to be lower than the value of CC capacity, using our valuation method.³

³We compared nuclear capacity to CC capacity on a “level playing field” (i.e., we used the same variable cost line items). We used an 83 percent capacity factor for nuclear, which is about equal to the capacity factor for the Catawba plant. Like other nuclear plants, they are operated every hour they are available to be run because operating costs are so comparatively low. We also assumed a 60 percent capacity factor for CC, as LaCapra notes. Indeed, as they have also noted, if CC were also assumed to run at an 83 percent capacity factor, our method would have produced a lower value for nuclear capacity. But we followed the EPRI Technical Assessment Guide (TAG) methodology in estimating CC costs, which recommends using 60 percent for new, baseload technologies primarily because of the uncertainties with new technologies (such as CCs). There is another reason for using a capacity factor of 60 percent (or at least a capacity factor less than 83 percent for non-nuclear baseload capacity)—a baseload technology must have cheap fuel costs. Nuclear capacity has both cheap fuel prices and attractive heat rates (BTUs/kWh), whereas CCs have attractive heat rates (even better than nuclear), but much higher fuel prices (per Btu). Therefore, we are comfortable in projecting nuclear capacity at an 83 percent capacity factor and CCs at 60 percent.

IC4. Alternate Cash Flow Methodology

In this section, LCA approximates the value of the MPAs' plant capacity by discounting the difference between future prices and future plant costs. They conclude that this method produces an average capacity value ranging from \$140 to \$340/kW.

LCA's analysis appears to have three significant problems: their use of extremely crude cost data, incorrect price data, and discount rates that are over-inflated, as detailed below. We conclude that the LCA analysis leads to a considerable understatement of nuclear capacity values using this alternate cash flow methodology.

One of the main problems with the LCA analysis is their assumption that our generation-level price of electricity was 2.9 cents, a number they then escalate at 2.5 percent per year to develop a price series. It is unclear how LCA arrived at 2.9 cents, since the intermediate generation-level price series that we used in our stranded cost analyses begins at a value of **3.2** cents in 1998 and increases from that level over time. The 3.5 cent number that appears in our report was comparable to a rough retail-level bulk power price that includes the cost of transmission, reflecting a 0.3 cent margin between the generation price and delivered bulk power price that should be more than ample to cover transmission costs.

A second problem is that LCA uses their own rough estimates of MPA operating costs in Section C3 and assumes that those costs must be 2.75 cents per kWh in 1998. They then escalate those costs at 2.5 percent per year as well. But Electricities has provided RTI with detailed projections of plant-specific operating costs. On average, the cost projections provided to us by Electricities are about 4.2 percent below the projections that LCA prepared. Furthermore, LCA's cost projections are 6 to 10 percent higher than Electricities' estimates in the first 15 years of the projection period, creating an even stronger "cost premium" effect on the discounted present values. It is unclear why LCA did not use the Electricities cost data in their analysis.

Third, LCA suggests the need for a discount rate premium of 3.5 to 7.5 percentage points over the conventional cost of capital. It appears on page 15 of the LCA analysis that they used discount rates of 15 percent and 18 percent to calculate discounted present

values. In view of our assumption that the state will absorb any excess D&D cost, we believe that such high discount rates are inappropriate. We think that the 10.5 percent rate representing the IOUs' cost of capital is reasonable.

We recomputed the value of MPA capacity using the cash flow methodology and data that we consider more valid. We used the plant cost data provided to RTI by Electricities in conjunction with the three alternative generation price series of our stranded cost analysis. Note that the Electricities cost data include the cost of capital additions to all MPA plants to keep them in service and also all administrative and general (A&G) costs assigned to each plant. We determined that the major source of differences in our results and LCA's was the projected electricity price series—on average over the entire projection period, LCA's projected electricity prices were 15 percent below the intermediate price series we used in our stranded cost calculations. Of course, as noted above, their "cost premium" also lowered their calculated capacity values.

When we used our data in this method we calculated MPA capacity valuations that range from \$1,052/kW (for the high price series) down to \$300/kW (for the low price series) using a discount rate of 10.5 percent. We calculated \$488/kW for the intermediate price series. Those valuations decline to \$763/kW, \$349/kW, and \$211/kW for the high, intermediate, and low price series, respectively, at a discount rate of 15 percent. Compare these to LCA's estimates of \$140/kW to \$340/kW. We believe that LCA's analysis with this alternate cash flow methodology is based on inferior data and therefore leads to a considerable understatement of nuclear capacity values.

II. Response to LCA Section II: Re-examined Conclusions

The last two pages of the LCA document recomputed the analysis of our Section 5.3 using LCA's alternative estimates reported in their Section I. They presented their analysis in two separate subsections on Divestiture and Dissolution, which we respond to in the following paragraphs.

IIA. Alternative Option—Hypothetical Divestiture Scenario

LCA used their estimates of various parameter values from their Section I to develop alternative values for the MPAs' residual debt. Their estimates of residual debt are more than twice the amounts suggested by our hypothetical analysis. LCA approximated the value of generation assets between \$355 million and \$655 million—equivalent to prices between \$238/kW and \$441/kW of capacity. They also implicitly "wrote down" the book value of invested funds by about \$800 million. Based on these valuations, they conclude that the residual debt (i.e., the negative net worth of the MPAs) ranges from \$4,245 million to \$4,595 million.⁴ They then presume that the full amount of residual debt must be retired through surcharges that are collected from MPA member city customers over 7 years—one of the options we had hypothesized along with our assumption of higher asset values. As a result, they conclude that MPA customers would face 40 to 47 percent rate increases under Divestiture, making it a totally infeasible policy option. We believe that the LCA analysis is incorrect for several reasons, as summarized in the following paragraphs.

First, LCA seems to improperly estimate the amount of residual MPA debt, even assuming that LCA's lowered estimates of generation capacity values are correct. They do so for two reasons: (1) they appear to omit the value of other valuable non-generating assets, and (2) they imply that the restricted investments held by the MPAs have no market value. Specifically, regarding (1), it appears that LCA omitted the other MPA property and operating assets whose book value equals \$110 million, and which we had also assumed to be part of the sale of MPA assets (see our Table A-2, page A-3 in our report). This omission appears to raise the LCA estimate of residual debt.

⁴Our report (Table 2-3, page 2-20) shows alternative estimates of the MPAs' net worth under various assumptions about the value of their generation capacity. Other assumptions for our analysis are detailed on page 2-19. Under that analysis approach, LCA's estimates of residual debt essentially imply that they assign capacity values for the MPAs that range from \$26/kW down to some negative number per kW. This seems paradoxical. But the paradox seems to be explained by LCA's apparent assumption of low or zero value for some MPA assets besides generation. Specifically, they seem to value the MPA invested funds that are restricted as essentially worthless (see our discussion in IA), and they seem to completely omit other MPA property and operating assets that are listed on the MPA balance sheets at \$110 million.

Regarding (2), given that the invested funds are shown on the MPA balance sheets at a value of \$1,739 million, the basis for LCA's assertion that those funds are worth only about half that under Divestiture or Dissolution is unclear. LCA seems to suggest that the book values of the MPAs' invested funds vastly overstate their market values. In contrast, we believe that the MPAs' restricted funds are valuable, and, therefore, that the restricted funds should be counted as part of the MPAs' assets. In our response to their Section IA above, we indicated how we think those assets should have been treated in the analysis.

Second, we maintain that Divestiture and Dissolution are still feasible options for resolving the issues surrounding MPA stranded costs, regardless of the value of the MPAs' residual debt. As we detailed in Section IB above, our report identifies a large number of permutations that can be employed to implement any one of the policy options that we identified; and those permutations are feasible under a variety of scenarios about the market value of MPA assets. Let us assume, for illustration, that LCA is correct in their assessment that the MPAs' residual debt under Divestiture is between \$4.2 and \$4.6 billion. Even in that case the state could define reasonable policies to implement Divestiture by employing some combination of the Debt Relief options we identified in Sections 5.1 and 5.2 of our report. In other words, the MPAs could be required to exit the generation business, and the residual debt could be paid via some method other than a surcharge that is solely applied to MPA member city customers.

An obvious alternative is to "securitize," as was recently done in California to compensate utilities in that state for their stranded costs. In this case, the state would borrow the requisite funds to pay off the residual debt, and at the same time impose some kind of electricity surcharge to pay off the new bonds, subject to the appropriate legal authority to do so. For example, the state could require a surcharge of the type that ElectricCities espoused until recently—a uniform statewide surcharge. Alternatively, the state could pay off the securitized debt with revenue from rate freezes as described on pages 5-10 and 5-11 of our report. The state could also consider other sources of revenue to pay the costs of servicing the securitized debt as identified in our report. Examples include property taxes, wires charges, and income taxes. In sum, the state

could borrow money to pay the residual debt and then impose charges or taxes to generate enough revenue to retire those new bonds.

Even if LCA's low valuations are correct, the state may still be able to negotiate a sale of the MPA generating assets to IOUs at values that are unquestionably above market values. For example, assume that the IOUs acquire the MPA assets at the prices we hypothesized in our Divestiture scenario in Section 5.3 of our report, but that the assets were really worth only the valuations assigned by LCA. Potentially, the purchasing IOUs could subsequently claim those excessive acquisition costs as part of their stranded costs as described on pages 5-11 and 5-12 of our report. IOUs could then file rate cases to recover those costs from their customers. Alternatively, if the state were to proceed with retail competition, IOUs could recover those stranded costs through policies defined by the legislative and regulatory processes that are set in place as part of the transition to retail competition.

RTI is not necessarily recommending any of these alternatives. However, we have summarized a few of them to illustrate that neither the Divestiture nor Dissolution options are made infeasible by extremely low (or even zero!) MPA asset values. We believe that LCA's dismissal of the Divestiture and Dissolution options reflects a fundamental misunderstanding of the options as described in our report.

IIB. Alternative Option—Hypothetical Dissolution Scenario

The last page of the LCA document follows the same logic for the Dissolution scenario as was used for the Divestiture scenario. Therefore, essentially all of our comments on LCA's Section IIA also apply to this section. The only difference in this section is that LCA reflects the sale of member city distribution assets and, accordingly, reduced their estimates of residual MPA debt to values ranging between \$3,445 million and \$3,795 million. In fact, LCA did not contest our valuation of the member cities' distribution systems at \$800 million. We were unable to develop solid market data on distribution system sales, or even a rough valuation methodology for those systems, so we had characterized our estimates as "speculative." However, especially in an era of retail competition,

RTI's estimated value may be far too low. For example, there is a sense in the industry that with emerging competition and convergence of services, the value of customer bases of existing utilities is rising. If so, the sale of those systems would further offset the residual MPA debt. In summary, for the same reasons detailed above in Section IIA, we believe that LCA's dismissal of the Dissolution option reflects a fundamental misunderstanding of the policy option as described in our report.